Abstract

The invention relates to a method and a mold for producing transparent optical elements from polymeric materials. In this case, the optical elements that can be produced in this way are intended to have at least surface regions which have reduced interfacial reflection. According to the invention, the procedure followed here is that, in the case of a reference element which consists of a polymeric material and corresponds to the respective optical element, the entire surface or a correspondingly selected surface is exposed to the influence of high-energy ions in a vacuum. In this way, an irregular nanostructure with alternately arranged elevations and depressions lying in between is formed on the corresponding surfaces. Subsequently, a thin electrically conducting layer is applied and electrochemical forming is carried out in order to obtain a mold with a negative contour which is superposed by the nanostructure. With such a mold, the optical elements can then be produced in a molding process of the nanostructure reducing the interfacial reflection.